



# Resources – National Coding Week




Here is a list of some of our resources including those to loan and links to websites with lots of fun activities and projects. Visit the [National Coding Week website](#) for more ideas.

| Our resources  |  |
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| <p><b>Spotlight on STEM Podcasts</b></p>                | <p>Audio interviews with some of our STEM Ambassadors and other employer volunteers. The following have links to computing, programming or the digital sector:</p> <ul style="list-style-type: none"><li>• <a href="#">Chris Powell, Research Director</a></li><li>• <a href="#">Anna McGrogan, Digital Marketer Lead</a></li><li>• <a href="#">Christabel Goode, Environmental Acoustic Consultant</a></li><li>• <a href="#">Jennifer Hall, PhD student</a></li></ul> |
| Our resources for loan anytime of year!<br>Email <a href="mailto:ambassadors@debp.org">ambassadors@debp.org</a> for more info or to book |  |
| <p><b>Astro Pi</b></p>   | <p>Astro Pi is the name of a small computer developed by the Raspberry Pi Foundation, in collaboration with the UK Space Agency and the European Space Agency (ESA).</p> <p><b>Age 10-14 (suitable for a community/school code club)</b></p>   |
| <p><b>Lego Mindstorms Education EV3</b></p>  | <p>Through real-life STEM challenges and engaging physical and digital creation, EV3 encourages participants to develop 21st century skills through coding as they program solutions in a real-world context.</p> <p><b>Age 10+ (2-6 participants per kit, STEM Clubs only)</b></p>  |
| <p><b>Lego/K'Nex</b></p>   | <p>Our normal Lego and K'Nex kits allows participants to explore and help unlock their creative building skills.</p> <p><b>Age 6+ (max 5 participants per box)</b></p>   |
| <p><b>Lego WeDo 2.0</b></p>  | <p>WeDo 2.0 basic programming and coding. It makes primary school science and computing come to life through hands-on tasks, real-world projects, and relevant technology that engages participants.</p> <p><b>Age 7+ (maximum 5 participants per kit)</b></p>   |

## Websites we'd recommend

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| <b>Blocky Games</b>  | A series of seven <a href="#">games</a> designed to teach programming to children. Games include Puzzle, which is an introduction to Blockly, Bird, which teaches conditionals.  |
| <b>Code Club</b>   | Code Club is a global network of free coding clubs for 9- to 13-year-olds. They have a range of <a href="#">step by step guides</a> for coding projects, which can teach how to create games, animations and more with code.                     |
| <b>CoderDojo</b>   | CoderDojo is a global volunteer-led community of free programming workshops for young people between 7 and 17. They have a range of <a href="#">projects</a> to do using scratch, python etc.  |
|  | The Hour of Code started as a one-hour introduction to computer science, designed to demystify "code". It now takes place each year during Computer Science Education Week but it can be run and <a href="#">activities</a> used all year round. |
| <b>Kodu Game Lab</b>   | Game development platform with lots of <a href="#">lessons</a> .   |
| <b>Microsoft MakeCode Arcade</b>   | Develop programming skills by quickly creating retro arcade games with Blocks and JavaScript in the MakeCode editor. Lots of <a href="#">tutorials</a> to choose from.   |
| <b>Microsoft Maker Champion</b>  | Complete <a href="#">digital skills projects</a> and collect badges as activities are collected.   |
| <b>Raspberry Pi</b>  | Raspberry Pi aims to put the power of computing and digital making into the hands of people all over the world. They have tons of fun <a href="#">step-by-step project guides</a> .  |

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| <p><b>Scratch</b></p>   | <p>With Scratch, you can program your own interactive stories, games, and animations. There are lots of <a href="#">resources</a> for educators.</p>   |
| <p><b>#STEMtogether</b></p>   | <p>The new STEM Inspiration scheme run by GE called <a href="#">#STEMtogether</a> was originally launched as a pilot in April. Worksheet week 12 (cracking code) would be fantastic for National Coding Week.</p> <p>The scheme will also be relaunched this academic year with new projects (including two specifically focusing on coding) and further worksheets.</p> |
| <p><b>VEXcode VR</b></p>  | <p>Learn Computer Science without a robot. <a href="#">VEXcode VR</a> lets you code a virtual robot using a block based coding environment powered by Scratch Blocks.</p>  |
| <p style="text-align: center;"><b>Other resources</b></p>                           |  |
| <p><b>Alan Turing</b></p>   | <p>Here are a couple of videos about Alan Turing, who created complex code breaking technique. The first is a short simple video and second more in-depth.</p> <p><a href="#">History Who's Who?</a><br/> <a href="#">Crash Course Computer Science</a></p>  |
|  | <p>You &amp; CO2 is an innovative way to bring climate action to life, and into our lives. By interacting with the story and allowing students to shape their narrative, they can see the consequences of their actions and gain the knowledge to achieve it, with a personal, connected lens. Follow on Twitter <a href="#">@YouandCO2CCE</a> to find out more.</p>     |

We regularly share information on our resources and other resources we recommend via our website [www.debp.org](http://www.debp.org) and via our social media channels. Please follow us.



**We hope you find them useful!**